Fig. 4. Hepialus humuli.—Head of pupa; mx/, maxillary palpi; mx'.f, labial palpi; f, paraclypeal piece.

PLATE IV.

- Fig. 1. Hepialus humuli.—Side view of larva.
- Fig. 2. Hepialus humul .- Dorsal view of larva.
- Fig. 3. Hepialus hectus.—Side view of larva.
- Fig. 4. Hepialus hectus.—Dorsal view of larva.

PRELIMINARY HAND-BOOK OF THE COLEOPTERA OF NORTH EASTERN AMERICA.

By Charles W. Leng and Wm. Beutenmuller.

(Continued from Vol. II, p. 190.)

HARPALINÆ.

The members of this sub-family have the middle coxal cavities entirely closed by the central pieces of the meso and metasternum, the epimera not attaining the coxa. Head with setigerous puncture over the eyes. Thorax with setigerous puncture at the side and posterior angle, very rarely without the latter and still more rarely without either. Anterior tibiæ always either obliquely sinuate or deeply emarginate within, the inner spur remote from the apex. They may be divided into two sections, Harpalinæ bisetosæ, head with two-supra-orbital setigerous punctures, and Harpalinæ unisetosæ, which have the head with one supra-orbital setigerous puncture. The former contain all the genera from *Panagæus* to *Helluomorpha* inclusive, and the latter from *Brachynus* to *Anisodactylus* inclusive.

Panagæus Lat.

Head more or less constricted behind the eyes and dilated to a semi-globular neck; clypeus prolonged beyond the base of mandibles, which are scissor-like; antennæ arising from under a distinct frontal ridge, three basal joints glabrous; terminal joint of maxillary palpi arising obliquely from the preceding joint; sides of elytra narrowly inflexed; thorax globular, abruptly constricted behind. Found under stones during May and June.

Synopsis of Species.

 P. crucigerus Say.—Hirsute; head and thorax black; elytra with four large red spots; thorax with numerous deeply punctatures, globular, abruptly constricted behind, angles acute; elytral striæ and punctures deep. Length .45 inch = 11 mm.

Habitat: N. Y., N. J. and southward.

P. fasciatus Say.—Pl. V, Fig. 1—Hirsute; head and thorax ferrugineous, the latter deeply punctured and abruptly constricted behind; elytra red with a transverse black band behind the middle and at the tip, striæ and punctured deep and distinct. Length .32 inch = 8 mm.

Habitat: N. Y., N. J. and southward.

Nomius Lap.

Antennæ somewhat moniliform, arising from a distinct frontal ridge; head stout, oval, neck broad; eyes prominent: labrum short, broadly emarginate; mandibles arcuate, with a feeble tooth on the inner edge at middle, and a setigerous puncture outside; body pedunculate, scutellum not visible between the elytra; elytra slightly margined at base near the hind angles; tarsi not dilated.

Occur under stones in moist places.

N. pygmæus—Dej. Piceous elytra elongate, sides parallel, striated, punctured; legs rufous, thorax broader in front than behind. Convex, slightly rounded anteriorly at sides; anterior angles obtusely rounded, hind angles straight. Length .28 inch = 7 mm.

Habitat: N. J., Can., Lake Sup., southward and westward to California, also Europe.

Patrobus Dej.

Medium size: Head more or less constricted behind the eyes or transversely impressed; elytra not margined at base; terminal joint of the palpi more or less cylindrical and obtuse at the tip, that of the labial palpi as long as the preceding; elytra elongate sides sub-parallel.

The members of this genus superficially resemble *Nebria*. Live under stones in damp places.

Synopsis of Species.

Disc of thorax convex, hind angles with a rather deep fossa; head behind the eyes constricted.

Hind trochanter of male and female one-third the length of the thigh,

rugicollis

P. longicornis Say.—Pl. V., Fig. 2.—Black above, piceus beneath; antennæ rufous; feet testaceous; mouth parts rufous; thorax somewhat broader than long, convex, sinuate behind, angles rectangular, dorsal line deep, basal impression rounded and punctured; elytra with sides sub-parallel, striæ deep and distinctly punctured, intervals convex on the disc, flattened at the sides; antennæ half as long as the body. Length .52 inch = 13 mm.

Habitat: Northeast America.

P. septentrionis Dej.—Shining black; thorax subcordate, rounded anteriorly, sub-sinuate behind, hind angles rectangular, subcarinate, dorsal line distinctly impressed; elytra, elongate-ovate, strice with punctures, third interval with three deep punctures; antennæ rufo-piceous; legs ferrugineous. Length .40 inch = 10 mm.

Habitat: New Hampshire to Labrador, westward to Alaska; also Siberia and Europe.

P. rugicollis Rand.—Black, body elongate, femora and tibiæ black; knees and tarsi piceus; head with a few transverse wrinkles; thorax transversely rugose, much flattened, especially at the sides, median line profound; basal region punctured, with the posterior impressions very rugose; elytra much depressed, striæ punctured, intervals flattened. Length .45 = 11.25 mm.

Habitat: New York, Pennsylvania, Massachusetts and northward.

Pogonus Dej.

Size small: Head not constricted behind the eyes; elytra margined at the base; mentum tooth deeply notched; ligula with a single bristle at the top; epilobes of mentum acutely toothed.

The general appearance of this genus is that of Bradycellus.

P. texanus *Chd.*—Body short, robust, convex, and of metallic blackish green color; hind angles of thorax rectangular and the base each side with two feeble foveæ; elytral striæ faint, only the inner ones being distinct, and distinctly punctured in front and only finely so behind, the marginal and sub-marginal striæ are confluent in front, the latter is almost obsolete, except towards tip, where it is deep; body beneath, blackish brown; legs testaceous. Length, .28–.32 inch= 7–8 mm.

Habitat: N. J. (Atlantic City), Texas.

Trechus Clair.

Size small: Elytra almost twice as wide as long or oblong oval;

anterior tibiæ slightly broader to tip, the emargination extending nearly to the middle of the tibiæ; terminal joint of palpi slender, acute at tip, that of the labial palpi shorter than the preceding.

Synopsis of Species.

Elytra oblong, nearly twice as broad as long, with five or six impressed striæ,

rubens

T. rubens Fabr.—Rufo-piceus; thorax subquadrate, at each side of base foveolate; hind angles obtuse; elytra oblong oval, with four distinct dorsal striæ, the outer ones obsolete; antennæ and legs rufotestaceous. Length .20 inch = 5 mm.

Habitat: Nova Scotia, also Europe.

T. chalybæus Dej.—Apterous, jet black, with a bluish gloss; thorax, subquadrate, foveolate at each side behind, posterior angles nearly straight; elytra oval, with four or five dorsal striæ, the outer two very feeble; antennæ and legs rufous. Length, .20 inch = 5 mm.

Habitat: New Hampshire, Lake Superior, westward to Alaska.

(To be continued.)

LOCAL ENTOMOLOGICAL NOTES.

Members of the New York Entomological Society and all others are solicited to contribute to this column their notes on rare captures, local lists and other items of interest relating to the insect fauna of New York City and vicinity.

A LIST OF THE SPIDERS OF LONG ISLAND, N. Y., WITH DESCRIPTIONS OF NEW SPECIES.

By NATHAN BANKS.

Nearly all the spiders in the following list have been collected by myself at or within a few miles of Sea Cliff. Collections in other portions of the island would doubtless extend the list somewhat; mostly in the line of micro-therididæ. About two hundred and forty-four species are recorded; distributed in sixteen families. The Therididæ is, of course, the largest, with about seventy-two species; the Epeiridæ next with thirty-six; and the Attidæ third with thirty-one species. The Attidæ are very well represented, and the Clubionidæ and Drassidæ